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Newsletter

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NGS Releases New Products on CD-ROM

The National Geodetic Survey (NGS) has released two new spatial data products on CD-ROM - data sheets for the north central United States and a high-resolution geoid model called GEOID99.

Data sheet CDs contain position, height, and descriptive information for more than 150,000 control points on two compact disks. The CDs also include several free software programs. The north central states CD covers Illinois, Indiana, Kansas, Michigan, Minnesota, and Nebraska.

A set of data sheet CDs for each of five U.S. regions costs \$50. To order contact the NGS Information Services Branch at the address shown on the right.

GEOID99 is used to compute geoid heights throughout the United States and may be ordered from the NGS Information Services Branch for \$30.

The geoid approximates the sea-level surface and is important to precise positioning because heights are customarily referenced to sea level.

GEOID99 is helping us improve the height component of the National Spatial Reference System because the new model increases the efficiency of using Global Positioning System (GPS) observations to compute accurate heights above sea level. For more information on GEOID99 visit the NGS Web site: www.ngs.noaa.gov

State Advisors Join NGS Outreach Program

NGS has added three new state advisors to its outreach and technology transfer staff. State advisors instruct local surveyors, state and municipal agencies, and others on how to use and preserve the National Spatial Reference System. The new advisors serve California, Mississippi, and Vermont.

California's new advisor is Marti Ikehara. Ms. Ikehara comes to NGS from the U.S. Geological Survey, where she worked as a hydrologist for 19 years. There she investigated land subsidence resulting from groundwater withdrawal. Ms. Ikehara graduated from Williams College in Massachusetts with a major in Geology and a minor in Environmental Studies.

Mississippi's new advisor is Kurt Shinkle, who comes to NGS after managing the surveying program at the New York State Department of Transportation and working for an engineering consulting firm in Boston, MA. While in New York, Mr. Shinkle became familiar with NGS programs and personnel when he managed the state's High Accuracy Reference Network project. Mr. Shinkle earned a bachelor's degree in surveying and mapping from the Iowa State University and a master's degree in cartography from the University of Wisconsin.

James Richardson is Vermont's new

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FOR INFORMATION

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Do you have a question? Ask an NGS scientist:

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GEOID

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VERTICAL DATUM

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The National Geodetic Survey (NGS) develops and maintains the National Spatial Reference System, which defines position, height, distance, direction, gravity, and shoreline throughout the nation. Since 1807 NGS and its predecessor agencies have led the world in precise positioning and developed emerging technologies for the public. NGS provides its expertise and a wealth of free information, including direct access to its data base, on the Internet at: www.ngs.noaa.gov

NGS Helps Students Learn GPS Surveying

The National Geodetic Survey (NGS), Trimble Navigation, Ltd., and the American Congress on Surveying and Mapping (ACSM), are helping Silver Spring, MD, high school students learn Global Positioning System (GPS) surveying techniques.

GPS surveying is part of Springbrook High School's "Information Technology in a Global Society" program. Students in this program gather, analyze, and communicate information in the context of an increasingly interdependent world.



Springbrook students installing a control point

NGS staff helped Springbrook students install and position a survey control point on the school's campus. The control point will be a part of both the Maryland's High Accuracy Reference Network and the Nation's Federal Base Network.

Springbrook students positioned their football field using GPS and learned how to correct their GPS observations using a National CORS (continuously operating GPS reference station).

Dave Zilkoski of NGS and Alan Dragoo of Trimble Navigation received the Montgomery County, MD, School District's "Friend of Career and Technology Education Award" for developing the GPS project.

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State Advisors Join NGS Outreach Program

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advisor. Mr. Richardson has worked in the surveying profession for 23 years, primarily with the National Imagery and Mapping Agency, the Interamerican Geodetic Survey, and the University NAVSTAR Consortium. His work experience includes plate tectonic studies using GPS. He earned a degree in Liberal Arts and a degree in Surveying from the Pennsylvania State University and has had additional training in astronomic positioning and GPS surveying.

Professor Linda L. Vélez-Rodríguez is the newest member of the NGS outreach staff. Professor Vélez-Rodríguez is an associate

professor of civil engineering at the University of Puerto Rico, Mayagüez Campus and conducts research in geographic information systems and remote sensing. She is a professional engineer and land surveyor in Puerto Rico and consults as an expert witness in land surveying. Professor Vélez-Rodríguez holds a baccalaureate degree in civil engineering and a master's degree in geodetic sciences, with a specialty in computer mapping.

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U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
National Geodetic Survey